

ABSTRACT OF THE DISCLOSURE

A vortex grit trap comprising a generally vertically extending tank of
5 circular cross-section including a separation zone having an inlet and an outlet
for liquid flow to and from the tank, and in which liquid is circulated about a
longitudinal axis of the tank, and, a grit collection zone positioned beneath the
separation zone in use, the trap being characterized by a generally circular tank
divider centered on the vertical longitudinal axis of the tank and extending
10 transverse thereto, the divider defining a notional boundary between the
separation and collection zones of the tank and being of smaller diameter than
the adjacent region of the tank so as to define with the adjacent tank wall an
annulus through which grit passes from the separation zone to the collection
zone in use, and, means for generating a cloud of gas bubbles migrating in use
15 upwardly through substantially the whole of said annulus whereby substantially
all grit passing from the separation zone into the collection zone passes through
the upwardly moving bubble cloud in said annulus so that organic solids settling
with the grit are displaced upwardly by the bubbles into the flow within the
separation zone while the grit passes through the bubble cloud in the annulus
20 and into the collection zone. There is also disclosed a method of separating grit
from an aqueous sewage flow.